REMARKS

Claims 1-36 are pending. By this Amendment, claims 1, 17-24, 28, 29 and 36 are amended. Claims 25-27 are withdrawn from consideration. Claims 1-24 and 28-36 stand rejected.

The Examiner rejects Claims 1-24 and 28-36 under 35 U.S.C. §101 as directed to non-statutory subject matter. Applicants respectfully traverse the rejection in light of the above amendments and the following remarks. Accordingly, Applicants respectfully request that the Examiner enter the amendments and withdraw the rejection.

The independent claims (1, 17, 28, and 29) have been amended to address the 35 U.S.C. §101 rejections regarding statutory subject matter. The claims as amended are believed to disclose a practical application with a "useful, concrete and tangible result," and thus overcome the rejection. For example, claim 1 as amended includes the step of "using the matrix equation solution to determine equivalent circuit parameters." Support for this amendment is found at Para. [0052] of the published application, which refers to FIG. 13, and which states, "This allows the method to generate (step 7) the current distribution and coefficients of the partial waves and output desired parameters describing the solution. These parameters may be a scattering matrix of the problem, or equivalent circuit parameters." (Emphasis added.) Equivalent circuit parameters have a practical use in, among other things, designing electronic packaging structures, IC packages, printed circuit boards, interconnects, patch antennas, microstrip antennas, and RFIC devices. (See Para. [0019] of published application.) Since the added claim language is explicitly provided in the text of the specification, and illustrated in FIG. 13, no new matter has been added. Similar language has been added to independent claims 28 and 29. Withdrawal of the rejection of claims 1, 28, and 29 is respectfully requested. In addition, claims 2-16 depend either directly or indirectly from claim 1, and claims 30-36 depend either directly or indirectly from claim 29, and are thus believed patentable for at least the same reasons.

Claim 17 has been amended to incorporate the features of claim 1 and claim 5 in independent format. In addition, claims 18-24 have been amended to depend from claim 17. Newly amended claim 17 is also believed to present a practical application with a "useful, concrete and tangible result," and thus overcome the rejection. For example, claim 17 as

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amended includes the step of "using the matrix equation solution to analyze nanostructures."

Support for this amendment is found at Para. [0036] of the published application, which states,

"Because the method can be used for volume scattering problems with the use of partial waves as

well, the methodology is also applicable to problems in materials and nanotechnology. It can be

used to analyze photonic bandgap structures, the electronic scattering from nanostructures, the

electronic <u>bandstructures of nanomaterials</u> and the electric and magnetic properties of composite

materials." (Emphasis added.) No new matter has been added since the added claim language is

provided in the text of the specification. Withdrawal of the rejection of claim 17 is respectfully

requested. In addition, claims 18-24 depend directly from claim 17, and are thus believed

patentable for at least the same reasons.

In view of the foregoing, it is submitted that this application is in condition for allowance.

Favorable consideration and prompt allowance of the application are respectfully requested. The

Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to

advance prosecution.

Respectfully submitted,

<u>/October 16, 2007/</u>

Date

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